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ABSTRACT

This literature review highlights the need for parent intervention programs in the education of their young handicapped children. Supportive research is cited from the following areas: Home-based programs for the disadvantaged; home-based programs for the handicapped; developmental factors in cognitive dysfunction; motivation; and the parent as mediator. It is suggested that remediation of cognitive dysfunction requires early intervention, the involvement of parents (particularly mothers), and extensive curricular organization. Implications for parent intervention programs are also reviewed. (CS)

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PARENTS AS TEACHERS:
A RATIONALE FOR INVOLVING PARENTS
IN THE
EDUCATION OF THEIR YOUNG HANDICAPPED CHILDREN

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Abstract

A rationale for involving parents in the education of their young handicapped children is presented. Supportive ideas are taken from the literature in the following areas: Home-based programs for the disadvantaged; home-based programs for the handicapped; developmental factors in cognitive dysfunction; motivation; the parent as mediator.

Formal professional efforts to involve parents as educators of their young children are a recent development. They have been stimulated in part by a belated realization on the part of educators that parents play an important role in the intellectual development of their young children. While the present trend toward home-based instruction has been most visible in the case of the disadvantaged, educators working with handicapped children have begun to develop similar programs.

Barsch (1968) has commented that no parent is ever prepared to be the parent of a handicapped child. Yet all parents shape their young children's behavior, select and mediate their experiences, and, in effect, serve as their child's first teacher. The role of teacher in relation to a handicapped child is frequently difficult and baffling even for the skilled professional. It must seem overwhelming to untrained parents who often have to cope with this role unassisted.

There are poignant accounts by parents (Anderson, 1963, Kastein and Trace, 1966) which reflect the bewilderment and hopelessness they have felt in trying to deal with their handicapped children. At the same time, these same parents have obviously shown an extraordinary determination and ingenuity in nurturing their children's development. Apparently these parents had special resources that enabled them to assume the parent-teacher role and produce favorable

results. Their accomplishments suggest that if the average parent of a handicapped child received systematic professional support, she (or he) might more nearly approximate these accomplishments.

There has been a long-standing tradition of professional home visits to parents of the handicapped, particularly the blind and the physically handicapped. However, these visits have been geared more to the teaching of self-help skills or to physical therapy than to the stimulation of intellectual development. This latter focus has been reserved for professional educators. Even in those cases where "home instruction" was offered, parents were excluded from the instructional process. This attitude--that intellectual development is the purview of educators only--has not only prevented educators from offering badly needed help to parents in their parent-as-teacher role, but has hindered educators from perceiving that such a role exists. Meanwhile, parents have had to fulfill this role as best they could, while often being criticized by educators for not having fulfilled their responsibilities.

Today, the field of special education has finally begun to assume professional responsibility at a sophisticated level for helping parents function as teachers of their children. However, home-based instruction for the handicapped is still an almost uncharted area badly in the need of exploration.

Home-Based Programs for the Disadvantaged

During the past decade, the field of early childhood education has been caught up in a period of experimentation and expansion. Two factors have helped to shape its direction. The first was a demand by disadvantaged parents and by society at large that their children be given a better foundation for academic achievement. The second was the argument by Hunt (1961) and others that appropriate early stimulation was critical for normal intellectual growth and that the lack of such stimulation contributed to the learning problems of disadvantaged children. Thus, it was natural for innovative childhood educators to undertake programs to help counteract early environmental deprivation in the disadvantaged. The large-scale Head Start Program (Westinghouse Report, 1969) was launched specifically for that purpose, as were programs directed by Bereiter and Engelmann (1966), Caldwell and Richmond (1968), and Klaus and Gray (1968).

While these programs utilized diverse approaches, all of them aimed at arresting the cumulative deficit characteristic of disadvantaged children. Thus, the finding that they produced only temporary benefits was a disappointment. It became evident that early childhood educators would have to try new directions before they could hope for a permanent effect on the intellectual development of the disadvantaged. It was in this atmosphere of search for alternative approaches that home-based programs for disadvantaged mothers and their young children

began to proliferate. Klaus and Gray (1968) had pioneered the first of these programs. Within a short period, similar programs were undertaken by Karnes (1968), Gordon (1969), and Weikart (1967). The most ambitious efforts at home-based programs for the disadvantaged to date are designed as supplements to Head Start. They are the Parent and Child Centers for children under three, and the Home Start Centers for those between the ages of three and six.

The trend towards home-based instruction for disadvantaged was more specifically stimulated by an important insight that has recently emerged from the child development literature. This centers on the unique contribution of parents to the early intellectual development of their children. A recognition of this contribution has impelled educators to search for new ways to support the mother in her role as "first teacher" of her child. Their expectation is that facilitation of this role will create a useful additional channel for counteracting the learning problems of the disadvantaged.

Parent education in the form of group meetings and parent-teacher conferences has been a long-standing tradition in the preschool field. However, it has always been viewed as secondary to the main concern of preschool education--the classroom program. The current emphasis on the instructional role of the mother has added a new dimension and new importance to parent education. In the case of programs that are exclusively home-based, this recognition of the instructional

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role of the mother has become a central professional focus. It is also being accorded prime status in bicurricular programs, i.e., those based both in home and school. The new emphasis on parent education is reflected in an address by Zigler (1971) at the inception of Home Start. He commented that the program that "impacts the child the most" was one that involves parents in direct interaction with their own child.

This argument for involving parents in their children's education has been presented most prominently in relation to the disadvantaged. However, it applies even more forcibly to the handicapped. Whereas disadvantaged children generally develop normally for the first year or so and slow down thereafter (Meier, Segner and Brueter, 1970), children with constitutional handicaps are confronted by adverse developmental factors from their earliest days. Thus, participation of their mothers in efforts to stimulate intellectual development takes on added urgency. There are two reasons for expecting parents to respond positively to the concept of home-based instruction. The first is their special investment in the handicapped child and his problems. The second is the opportunity to try a new approach to a personal problem which engenders a feeling of bafflement and helplessness.

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Home-Based Programs for the Handicapped

According to Calvert (1971), three-quarters of the project proposals considered under the Federal Handicapped Children's Early Assistance Act in 1969 were disapproved for reasons related to inadequate planning for parent participation in the proposed programs. Calvert's statement points up the growing emphasis by educational leaders on active participation of parents in programs for young handicapped children. This emphasis, along with the influence of the burgeoning home-based programs for the disadvantaged, probably portends a growth in home-based programs for the handicapped in coming years.

Sporadic examples for such programs are currently visible. Programs for the blind have a long tradition of home-visiting which dates back to early in the century. This tradition of home-visiting is still apparent in current service-oriented programs for the blind. At least one program (Fraiberg, Smith and Adelson, 1969), has focused on specific guidance of mothers' interactions with their blind infants. While there is a history of home-visiting programs for cerebral palsied children, these programs have generally been medically oriented. More recently, home-visiting programs for the cerebral palsied have also provided assistance with day-to-day management (Weider and Hicks, 1970), along with counselling services for parents. Additional programs

conducted by United Cerebral Palsy Associations have used the nursery school cooperative model in which mothers assist in the classroom and attend parent education classes (Headley and Leler, 1961). The long-standing focus on residential treatment for the deaf has tended to curtail home guidance for parents of the deaf. This lack is currently being remedied by programs at centers such as the John Tracy Clinic in Los Angeles, the Bill Wilkerson Speech and Hearing Center in Nashville (Horton, 1968), and the Robbins Speech and Hearing Center in Boston (Luterman, 1967). The John Tracy Clinic has also developed correspondence courses for parents of preschool deaf children. (Tracy and Thielman, 1972), and deaf-blind children (Thielman and Meyer, 1973). A scattering of home-based programs for retarded children are reported in the literature, the most comprehensive being that conducted by Weikart (1967) with mildly retarded subjects with disadvantaged backgrounds. The Portage Project (Tayner, 1972) involved home training of young multiply handicapped children, mostly retardates, with mothers carrying out educational prescriptions defined for a week at a time by Home Trainers. Only one formal home-based program for emotionally disturbed children was identified through the literature, that of the League School in Brooklyn (Doernberg, Rosen and Walker, 1968). Susser (1974) described a program for young brain injured children in which parents were used as both teaching assistants in the classroom and as home-teachers.

Aberrant Development

In developing the present rationale for home-based instruction of the handicapped, a major consideration has been the early adverse factors that produce cognitive dysfunction in these children.

The seriously handicapped child, like all children, is subject to general developmental laws. However, he also seems to be subject to special subprinciples within these laws--subprinciples which pertain to an aberrant developmental course. These subprinciples center around specific adverse factors, both intrinsic and extrinsic, that appear in almost all seriously handicapped children. They are exemplified by a cumulative intellectual deficit, and by impairment in affective aspects of the mother-child relationship. These adverse factors are seen as operating in a mutually reinforcing manner to produce a negative impact on the child's overall development. The sections which follow provide expansion and documentation of the thesis that early adverse factors reinforce each other in producing cumulative dysfunction in handicapped children. A better understanding of these factors should pinpoint ways of compensating for their effects.

Intrinsic Factors

Intrinsic factors which are seen as having an adverse effect on

cognitive function in the handicapped are cumulative deficit, "critical period" problems, and sensory deprivation. They have received a great deal of attention in the literature, notably from those concerned with disadvantaged children. They are viewed here as central determinants of cognitive dysfunction in the handicapped child. Other intrinsic factors which play a distinctive role in the aberrant developmental course of handicapped children involve temperament and motivation.

Cumulative deficit. Hebb (1949) has discussed the initially diffuse character of the infant's sensory input and has described the way in which it takes on cortical organization. He has defined this process as "primary learning" and has stated that it forms a bases for all subsequent learning. Hunt (1961) has elaborated on Hebb's theory, suggesting that primary learning includes early information-processing strategies. Organismic factors in the handicapped child would hamper this initial priming, or tuning up, of the cognitive apparatus. Thus, the process of cumulative deficit would be activated from the child's earliest days.

Fowler (1971) has pointed out another aspect of the cumulative deficit problem that has special application to the handicapped. "Failure to early establish a high-level cognitive baseline for learning is thus to generate alternative, poor modes of functioning. These alternative modes become preferred, but poorly adaptive systems leaving the child to meet each new encounter with the same old, less

effective means" (p.255). The "poorly adaptive systems" noted by Fowler are most frequently encountered among the handicapped. In sufficiently severe cases, as in the profoundly retarded, these can lead to a virtually total arrest in cognitive growth.

Problems relating to the "critical period" hypothesis. A child who is subject to cumulative deficit would also suffer from a related set of problems. As the lag in cognitive functioning increases relative to the normal developmental timetable, the child becomes increasingly vulnerable to problems associated with the "critical period" hypothesis. According to Caldwell (1962), these arise from the fact that there is an optimal developmental period for the emergence of various skills in the young child. If these are not mastered within normal time limits, they will be bypassed, or else will appear in an attenuated form. In terms of the handicapped child, his developmental lag, if sufficiently severe, would lead to "critical period" problems. These, in turn, would hinder the acquisition of more advanced skills, and so would contribute further to the process of cumulative deficit.

Sensory deprivation. An important consequence of impairment in early sensory learning of the handicapped child would be a vulnerability to sensory deprivation. As noted by Meier, Segner and Brueter (1970), sensory deprivation can stem both from extrinsic factors, as in the case of the disadvantaged, or from intrinsic factors, as in the brain-injured. Intrinsic factors could be expected

to produce analogous sensory deprivation in other types of handicap.

DiLeo (1967) has described the newborn normal infant as being "in constant exchange" with the environment and thus seeking out his own stimulation. However, the handicapped child may be hampered in this goal because of inadequate sensory processing mechanisms. Deprivation in sensory stimulation could be expected to produce an apathetic reaction to environmental stimuli similar to that seen in institutionalized children (Provence and Lipton, 1962). The early sensory deprivation experienced by handicapped children may help to explain the motivation problems often manifested by them.

The developmental factors just reviewed point up the urgency of early remedial planning for handicapped children. These factors also pose special hazards for the affective relationship between parent and child. Thus, the cumulative deficit factor, manifested in poor progress on the part of the child, would produce a reaction of disappointment and anxiety in the parent. Again, repeated failure in efforts to evoke a response to play materials in the child would give the parent a feeling of helplessness and discouragement.

Temperament. Longitudinal studies (Escalona, 1968; Thomas, Chess and Birch, 1968) indicate that infants start out with distinctive temperamental characteristics and that these help to shape adult responses towards them. According to Thomas, Chess and Birch, the "easy" child is one who shows a positive response to new stimuli, adapts readily to change, exhibits a preponderance of positive moods,

and has reactions that are mild to moderate in intensity. Such a child differs markedly from the "difficult" child who responds to new stimuli with negative moods, and has reactions of high intensity. A major finding by these authors was that the temperamentally difficult child was more likely to be diagnosed at a later date as suffering from a behavior disorder.

Kahn's (1969) description of psychological characteristics in the brain-damaged fits into the general picture of the difficult child. According to Kahn, such a child exhibits lability of mood, reduced tolerance to frustration, problems in impulse control, a tendency towards disorganized or regressed behavior, and a pervasive reaction of anxiety.

The autistic child also fits readily into the picture of a temperamentally difficult child. Kanner (1957), describes such a child as seriously lacking in response to interpersonal contact, and generally to objects as well. He is highly resistant to change, and his moods are predominantly passive or apathetic, interspersed in some cases with sudden spells of irritability, or outbursts of temper.

Sensorily impaired children present temperamental difficulties of a different kind. As a result of the exclusion of the visual world, the blind infant is described (Burlingham, 1961) as initially passive and withdrawn. However, after interpersonal contact was established, such children typically develop an overdependent response

to the adult. Ewing and Ewing (1964) have referred to the deaf child as "exceedingly vulnerable to a sense of insecurity." They also cite research findings which show that the deaf child has twice as many tantrums as the hearing child.

Intensification of the temperamental difficulties of handicapped children can be expected on several counts. First, such children are subject to specific organismic problems and discomforts which accompany severe handicaps. Secondly, they tend to be imparied in the ability to have satisfying exchanges with the social and/or physical environment. Finally, the problem of responding to and handling these difficult children create adverse reactions in their mothers which have a negative effect, in turn, on their children.

Motivation. Clinical experience suggests that seriously handicapped children have limited intrinsic motivation. This contrasts with the high level of intrinsic motivation manifested by the well-functioning normal child and the self-activated learning which accompanies it. Several aspects of the child development literature help to explain the motivational problems characteristic of the handicapped child. First, the sense of competence (White, 1959) which spurs the normal child to further activity might be impaired in the handicapped child because of faulty or erratic performance. Secondly, as Hunt (1963) has suggested, an important incentive for interaction with the environment stems from incongruity between "what is known and what is perceived." Since many handicapped

children would be less capable of grasping this incongruity, they would also be less motivated to interact with the environment and learn from it.

Another factor which has potential importance for motivation in the handicapped should be noted here -- the mother's role as mediator of experiences for the young child. This role may be disrupted when the child is handicapped. This postulate and its ramifications are considered in more detail in a later section.

Extrinsic Factors

This section focuses on factors which are not inherent in the child's impairment, but rather which involve an environmental reaction to this impairment. These factors include: maternal mourning, the affective interaction between mother and child, and the mediational role of the mother.

Maternal mourning. Meadow and Meadow (1971) have discussed some of the factors underlying the assumption of the parental role when a child is handicapped. They state that transition to the role of parenthood requires "socialization," i.e., learning ways of behaving and seeing oneself in a given role. However, parents undergo a different sort of socialization process when they are confronted with the task of becoming the parent of a handicapped child. It is then experienced not simply as a transition to parenthood but as "an unwanted and distasteful status." The power of this feeling is

suggested by Burlingham's (1961) comment that the mother of a blind infant may wish for its death.

Solnit and Stark (1961) have interpreted the reaction of mothers to newborn defective babies as one of mourning. Touching on the mother's image of the expected child and her psychological preparation for its arrival, they contrasted these with the sudden loss of that baby, and the sudden appearance instead of a "feared, threatening, anger-evoking child." Absorption of this trauma is inevitably a slow process characterized by disappointment and a feeling of helplessness. Thus, at least in cases where the defect is apparent or known to the mother, the very fact of childbirth lays the groundwork for a negative response to the mothering role. While dynamics would vary somewhat in cases in which awareness of defect occurs at a later time, a similar mourning reaction could be anticipated at that point.

Affective interaction between mother and child. It was previously noted that constitutional deficits in the child may impair the affective interchange between mother and child. This reaction in the mother would intensify such response patterns as withdrawal, dependency, or hostility. Yarrow (1968) has stated that the most distinctive aspect of the human environment for the young infant is the affective interaction with the caretaker. This must be even truer for the handicapped child, with his special need for acceptance and support. Hence, hindrance of this interchange would have a proportionally more serious effect. Yarrow has described this interchange as including "protecting, buffering, gratifying, and responsive" functions on the part of the

mother. However, the fulfillment of these functions would be difficult even under favorable circumstances because the responses of the handicapped child tend to be delayed, erratic, or generally "off kilter." The undependable communication system between the handicapped infant and his mother contrasts with the efficient signallying system which is developed between the normal infant and his mother.

Obviously, the mother's temperament and personal needs also enter into the affective interchange with her child, whether he is normal or handicapped. As Caldwell and Hersher (undated paper) have noted, the "affiliative" mother will feel frustrated by an aloof baby, while the aloof mother has special problems with the overdependent child. Such reactions would be intensified under the special pressures engendered by a handicapped child.

Mothers who have a very stressful reaction to the child's handicap, or mothers with unfavorable temperamental and emotional characteristics, will clearly have a negative influence on the child's overall development. However, by the same token, potential developmental problems in the handicapped child can be alleviated when maternal responses have an appropriately supportive quality. In the study by Thomas, Chess and Birch (1968 previously cited), three children were identified as suffering from brain-damage. The variation in their subsequent development led the authors to conclude that the nature of behavioral response in such children is not a direct manifestation of brain-damage. Rather it is the result of the interaction of a child

with a damaged nervous system and the interpersonal environment.

While the main focus of the present discussion has been on the troublesome problems encountered by mothers of the handicapped, it should be noted that mothers are also able to assimilate these problems to a considerable extent, and often successfully assume the traditional nurturing role in relation to their child. Furthermore, in working through these problems, mothers are apt to invest a special feeling of involvement and concern in their handicapped child. These positive maternal attitudes should constitute a favorable base for mothers who take on the "parent-teacher" role.

The mother's mediational role. The role of the mother as mediator of experience for her child has recently been receiving increased attention. Miller (1970) has discussed such mediational functions as ordering the physical and spatial environment for the child, directing his attention to relevant dimensions of objects, and providing a general response model for him to imitate.

In a similar vein, Fuerstein (1970) has described the mediating adult as interposing herself between the child and external sources of stimulation, and as "framing, selecting, focusing and feeding back" environmental experiences so that they create appropriate learning sets. In his view, such mediation is a prerequisite to autonomous nonmediated learning by the child. In touching on negative factors which might hinder mediated learning, Fuerstein referred to

socio-economic class and to various problems inherent in the parent or the child.

Fuerstein's view that intrinsic factors in a child can hamper the mediational role of the adult is particularly relevant to the handicapped child. The adverse factors previously cited, be they developmental, temperamental, or motivational, all hinder the mother in her efforts to mediate experience and learning for the child. She brings to this role two added problems: a history of complex affective interchange with the child; and the investment of the mediational role with overtones related directly to the child's handicap. These overtones may range from a feeling of futility in attempting to teach the child anything to an expectation of having a "magical" affect on his development. As a consequence of these factors, learning frequently becomes an emotionally charged area for the handicapped child and his mother.

Mothers of normal young children generally present experiences to their children in a pleasurable context, whether this represents their own personal response to them, or one that they project on behalf of the child. However, this positive attitude would inevitably be tempered in the case of mothers of the handicapped because of problems attached to their efforts at mediation. The disruption of the mother's mediational role would impair the quality of cognitive stimulation available to the child. It would also deprive him of a satisfactory model for the development of intrinsic motivation. The latter factor

could help to explain the inadequate motivation towards play materials and learning characteristic of the handicapped child.

Higher-Order Cognitive Processes

The present rationale assumes that constitutional factors in the handicapped can produce an aberrant developmental course, and that this will lead, in turn, to some degree of cognitive dysfunction. It is further posited that this dysfunction is concentrated in higher-order intellectual processes. Research support for this view is provided by House and Zeaman (1963), Luria (1963), and O'Connor and Hermelin (1963).

A further line of support for a special deficit in the higher-order process of the handicapped is provided by Jensen (1969). He hypothesized that children's abilities can be subdivided into lower-order associational ones (Level I), and more advanced higher-order ones (Level II). Based on an overview of relevant research, he concluded that both disadvantaged and retarded children perform as well as equal MA normals on Level I tasks, but lag behind them on more advanced Level II tasks.

A final reason for postulating a higher-order processing deficit in the handicapped is based on two studies conducted by Levitt. Both studies dealt with higher- and lower-order cognitive processes as inferred from behavioral responses. The first study (1972b) showed that when retardates and normals are equated for reading scores, normals make significantly more higher-order errors than do retardates.

The inference was that normals would also use more higher-order processes in making correct responses. The second study (1972a) suggested that mediational processes used by middle-class normals were superior to those used by retarded, brain-injured, and disadvantaged subjects.

Implications for Home-Based Programs for the Handicapped Child

The foregoing review has highlighted a set of adverse factors that may hamper the development of the handicapped child and contribute to his cognitive dysfunction. It suggests that remediation of such dysfunction requires early intervention; the involvement of parents, particularly mothers; and extensive curricular organization. Various curricular models stressing such organization can be found in both the early childhood and special education literature.

A deficit in higher-order processing characteristic of handicapped children was previously noted. These processes evolve autonomously in normal children (Kagan and Wright, 1963). However, their development and application present special problems for the handicapped. Hence, a relevant program for handicapped children could be profitably conceptualized along an additional dimension, based on the developmental accomplishments of the normal child and the higher-order strategies that underly them. It should be helpful to review representative tasks that tap higher-order strategies in normal children, and then

use them as a base for developing similar strategies in the handicapped.

The foregoing review also highlighted negative aspects of the affective interchange between the handicapped child and his mother. Amelioration of these negative aspects would facilitate the mother's assumption of the parent-teacher role. There are well developed general guidelines available in the literature (e.g., Robinson and Robinson, 1965, and Barsch, 1968) for working with parents in terms of their attitudes towards their handicapped children. A variety of formats are available, ranging from parent-teacher conferences and group meetings, to individual counseling and psychotherapy. These formats would need exploration to determine which are appropriate for particular home-based programs.

Another aspect of mother-child interaction that emerged from the previous review needs consideration here. This centers on a difficulty mothers may have in fulfilling their function as mediator of experience for their handicapped children. This, in turn, may have negative effect on their children's cognitive functioning and motivation. One helpful approach here would be to formulate a method which helps the mother provide both a cognitive and affective model for her child in the exploration and use of materials. One program which does this with mothers of young disadvantaged children is the Mother-Child Home Program developed by Levenstein (1971).

While the full impact of home-based instruction is still unknown,

initial results have been encouraging. It is a promising new avenue for the education of the handicapped that obviously warrants further exploration. It is also bound to stimulate interesting new ideas and approaches to the education of the handicapped.

In an age when more and more severely impaired children are being kept in the home and community rather than in institutions, it is not only desirable but almost imperative for the educational world to provide direction and aid to parents in the long-term, difficult task they have undertaken. If we are really dedicated to helping handicapped children achieve their maximum potential, we will do this. If we want to make our own work as teachers more fruitful we will do this.

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